

Test Subject	Testing Steps
1. Open VNC Tiger Viewer	Download VNC Tiger Viewer
2. Connect to Raspberry Pi	Using VNC Tiger Viewer connect to the Raspberry Pi
3. Open M.O.S.I.S U.I	Open in Terminal
4. Run Sensors Diagnostics	Automatically
5. Run Camera Diagnostics	Automatically
6. Show Preview Screen	Automatically
7. Select 1st Study on Study Selection Menu	Use the Holoeffect sensor to cycle to the Study Selection Menu and select the study
8. Execute Selected Study	Use the Holoeffect sensor to cycle back to the Preview Screen and start the study
9. Change the Gain in the Gain Configuration Menu	Use the Holoeffect sensor to cycle to the Gain Configuration Menu
10. Verify Gain Changes	Use the Holoeffect sensor to cycle back to the Preview Screen
11. Change the Shutter Speed in the Shutter Speed Configuration Menu	Use the Holoeffect sensor to cycle to the Shutter Speed Configuration Menu
12. Verify Shutter Speed Changes	Use the Holoeffect sensor to cycle back to the Preview Screen
13. Change the White Balance in the White Balance Configuration Menu	Use the Holoeffect sensor to cycle to the White Balance Configuration Menu
14. Verify White Balance Changes	Use the Holoeffect sensor to cycle back to the Preview Screen

15. Change Saturation in the Saturation Configuration Menu	Use the Holoeffect sensor to cycle to the Saturation Configuration Menu
16. Verify Saturation Changes	Use the Holoeffect sensor to cycle back to the Preview Screen
17. Execute Selected Study with new Settings	Use the Holoeffect sensor to cycle back to the Preview Screen and start the study
18. Select 2nd Study on Study Selection Menu	Use the Holoeffect sensor to cycle to the Study Selection Menu and select the study
19. Execute Selected Study	Use the Holoeffect sensor to cycle back to the Preview Screen and start the study
20. Select 3rd Study on Study Selection Menu	Use the Holoeffect sensor to cycle to the Study Selection Menu and select the study
21. Execute Selected Study	Use the Holoeffect sensor to cycle back to the Preview Screen and start the study
22. Select 4th Study on Study Selection Menu	Use the Holoeffect sensor to cycle to the Study Selection Menu and select the study
23. Execute Selected Study	Use the Holoeffect sensor to cycle back to the Preview Screen and start the study
24. Stop Selected Study	Use the Holoeffect sensor to stop the study
25. Verify Folders with the executed Studies	Look in the Media folders of the raspberry pi
26. Verify metadata in folders related to the executed studies	Open the json file in the study folders
27. Shutdown Device	Press the two buttons to start shutdown

Data Used	Requirement Tested	Expected Output	Actual Output
		Get VNC Tiger Viewer executable	Got VNC Tiger Viewer executable
		Mirror Raspberry Pi image	Mirrored Raspberry Pi image
		Camera and UART initialization in terminal	Camera and UART initialized in terminal
		Application Start	Application Started
	10	Sensor Information and Camera Feed	Sensor Information and Camera Feed presented oin terminal
Sensor Hub data	1,2,14,15,16	Preview Screen displays camera and sensor feeds	Preview Screen displayed camera and sensor feeds
StudyProfile.json	3,4,5,6,7,8,9,10,13,17,18,22,23	Selected Study Profile	Selected Study Profile
StudyProfile.json	19	Start Capture	Capture started
	27,28	Gain Label Change	Gain Label Changed
getcurrentGain()		Camera Feed change	Camera Feed gain changed
	31,32	Shutter Speed Label Change	Shutter Speed Label Changed
getcurrentShutterSpeed()		Camera Feed change	Camera Feed brightness changed
	33,34	White Balance Feed Change	White Balance Feed Changed
getcurrentWhiteBalance()		Camera Feed change	Camera Feed color temperature change

	29,30	Saturation Label Change	Saturation Label Changed
getcurrentSaturation()		Camera Feed change	Camera Feed saturation change
		Start Capture	Capture started
		Selected Study Profile	Selected Study Profile
StudyProfile.json		Start Capture	Capture started
	26	Selected Study Profile	Selected Study Profile
StudyProfile.json		Start Capture	Capture started
		Selected Study Profile	Selected Study Profile
StudyProfile.json		Start Capture	Capture started
	21	Stop Capture	Capture stopped
	12,24	All Study Folders created	All Study Folders created
	11,25	Metadata.json created	Metadata.json created
	20	Shutdown safety the device	Device shutdown safely

Pass or Fail	Tool or Program (if applicable)	Location of Function (In Case of Errors)
Pass		
Pass	VNC Tiger Viewer	
Pass		Restart Application
Pass		Restart Application
Pass		Restart Application
Pass		M.O.S.I.S->Front_End->PreviewScreen.py
Pass		M.O.S.I.S->Front_End->StudyProfileSelectionMenu.py
Pass		M.O.S.I.S->Front_End->PreviewScreen.py
Pass		M.O.S.I.S->Front_End->GainConfigurationMenu.py
Pass		M.O.S.I.S->Front_End->PreviewScreen.py
Pass		M.O.S.I.S->Front_End->ShutterSpeedConfigMenu.py
Pass		M.O.S.I.S->Front_End->PreviewScreen.py
Pass		M.O.S.I.S->Front_End->WhiteBalanceConfigurationMenu.py
Pass		M.O.S.I.S->Front_End->PreviewScreen.py

Pass	M.O.S.I.S->Front_End->SaturationConfigurationMenu.py
Pass	M.O.S.I.S->Front_End->PreviewScreen.py
Pass	M.O.S.I.S->Front_End->MainMenu.py
Pass	M.O.S.I.S->Front_End->ShutterSpeedConfigMenu.py
Pass	M.O.S.I.S->Front_End->MainMenu.py
Pass	M.O.S.I.S->Front_End->ShutterSpeedConfigMenu.py
Pass	M.O.S.I.S->Front_End->MainMenu.py
Pass	M.O.S.I.S->Front_End->ShutterSpeedConfigMenu.py
Pass	M.O.S.I.S->Front_End->MainMenu.py
Pass	M.O.S.I.S->Front_End->MainMenu.py
Pass	M.O.S.I.S->Front_End->FolderStructureGenerator.py
Pass	M.O.S.I.S->Front_End->FolderStructureGenerator.py
Pass	M.O.S.I.S->Front_End->MainMenu.py